





RECEIVED
SEP 27 2013

United States Department of State
Washington, D.C. 20520

SEP 4 2013

Case No. F-2010-07559
Segment: ER-0002
Requester: Robert A. Wampler

TO: National Freedom of Information Officer
U.S. Environmental Protection Agency (EPA)
1200 Pennsylvania Avenue NW (2822T)
Washington, D.C. 20460

FROM:  Sheryl L. Walter, Director 
Office of Information Programs and Services

SUBJECT: FOI/PA Referral for Direct Reply

In processing this request, we have located the enclosed four documents which originated with your agency. Please review this material and reply directly to the requester. No excisions are required for Department of State equities.

If you have any questions, please contact Mr. Geoffrey Hermesman at HermesmanGF@state.gov.

Attachments:

Copy of request letter

Documents C05326864, C05326935, C05326772, and C05326904

Brothers, Tyler L

F 201007559

From: FOIA [FOIA@state.gov]
Sent: Tuesday, November 16, 2010 9:48 AM
To: Robert A. Wampler
Subject: FOIA Request Letter

Thank you for filing your FOIA request online on 11/16/2010. The process for completing your request will now begin. Here is a review of your request.

I am willing to pay \$100 for my request.

I am a representative of the news media affiliated with The National Security Archive and this request is made as part of a news gathering effort and not for commercial use.

The time period of my request is between 1/1/1979 and 12/31/1993

The records I request can be described as follows:

In all correspondence regarding this request, please refer to the National Security Archive reference number 20101307DOS380.

Please review for declassification and release all policy-related documents found in the following State Department retired record files (specified by box and folder title):

Accession 59-96-1262: Lot 93D395. Subject Files on Environmental Issues From 1979-1993.

Box 5: Ozone 1987-89;
Environment Issues Paper 1989-90;
Canada 1987-90.

Box 7 Ozone 1988-89;
Montreal Protocol (Ozone) 1987-91.

I am primarily interested in documents dealing in whole or in part with the policy decision-making process (memoranda, memoranda of conversation, reports, cables, briefing papers and notes, meeting minutes, etc.) with respect to U.S. policies and negotiations pertaining to the subjects of these files. You may exclude from the scope of your search and review any documents that are of a purely administrative or logistical nature, or which provide information that is already publicly available (i.e., news briefings, press clippings, published academic or foundation reports and studies, etc.).

Robert A. Wampler
foiamall@gwu.edu
2130 H Street, NW, Suite 701
Gelman Library, George Washington University Washington D.C.
20037
202-994-7000
202-994-7005
Reference Number:



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

TRANSFERRED FOR DIRECT REPLY: EPA

MAR 28 1989

OFFICE OF
INTERNATIONAL ACTIVITIESMEMORANDUM

TO: William A. Nitze, State/OES/E
 Ted Williams, DOE
 Bob Watson, NASA
 J.R. Spradley, DOC
 Bob Reinstein, USTR
 Indur Goklany, DOI
 Dave Gibbons, OMB
 Janet Dorigan, OSTP

FROM: Scott A. Hajost *Scott A. Hajost*
 Acting Associate Administrator for
 International Activities

EE
 Eileen Claussen
 Acting Deputy Assistant Administrator for
 Air and Radiation

~~SUBJECT: U.S. Position Papers for Helsinki Ozone Use Impact~~

The First Meetings of Parties to the Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer will be held in Helsinki on April 26-28 and May 2-5, respectively. On March 16, the Department of State sent a memorandum assigning responsibility for the preparation of U.S. position papers for both meetings. Attached for your comments and clearance are draft papers for agenda items for which EPA was assigned the lead.

Please submit comments on those papers stamped "draft" to Jamison Koehler of my staff (Tel #382-4894, Fax #382-4470) by noon on Friday, March 31. Comments on all other papers should go to Steve Seidel (Tel#382-2787, Fax#382-3644), also by Friday. Thank you for your prompt attention.

Attachments

ozone
Box 5
5496-1262
1st 920395



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 28 1989

OFFICE OF
INTERNATIONAL ACTIVITIES

MEMORANDUM

TO: William A. Nitze, State/OES/E
Ted Williams, DOE
Bob Watson, NASA
J.R. Spradley, DOC
Bob Reinstein, USTR
Indur Goklany, DOI
Dave Gibbons, OMB
Janet Dorigan, OSTP

FROM: Scott A. Hajost *Scott A. Hajost*
Acting Associate Administrator for
International Activities

EE
Eileen Claussen
Acting Deputy Assistant Administrator for
Air and Radiation

SUBJECT: U.S. Position Papers for Helsinki Ozone and Montreal

The First Meetings of Parties to the Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer will be held in Helsinki on April 26-28 and May 2-5, respectively. On March 16, the Department of State sent a memorandum assigning responsibility for the preparation of U.S. position papers for both meetings. Attached for your comments and clearance are draft papers for agenda items for which EPA was assigned the lead.

Please submit comments on those papers stamped "draft" to Jamison Koehler of my staff (Tel #382-4894, Fax #382-4470) by noon on Friday, March 31. Comments on all other papers should go to Steve Seidel (Tel#382-2787, Fax#382-3644), also by Friday. Thank you for your prompt attention.

Attachments

done
Box 5
59 96 .1262
1st 920395



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

TRANSFERRED FOR DIRECT REPLY:
EPA

FEB 23 1988

OFFICE OF
INTERNATIONAL ACTIVITIES

MEMORANDUM

TO: Richard Smith
Acting Assistant Secretary of State for Oceans
and International Environmental and Scientific
Affairs

FROM: *Sheldon Meyers*
Sheldon Meyers
Acting Associate Administrator

SUBJECT: U.S. Financial Contribution to Montreal Protocol

As indicated in the attached communications, UNEP Executive Director Mostafa Tolba has asked each signatory to the Montreal Protocol to help cover the cost of implementing the Protocol over the next three years. Specifically, Dr. Tolba has asked each developed country signatory to contribute \$15,000 per year toward the total estimated cost of between \$250,000 to \$300,000 per year. UNEP will contribute \$25,000 per year; each developing country signatory has been asked to contribute \$10,000.

EPA can contribute \$15,000 for the first year, provided that the State Department covers the U.S. contribution thereafter. The United States, as you know, played a leading role in negotiating this historic global environmental agreement. It is important that we contribute to its successful implementation. Please call me at 382-4870 if you would like to discuss this personally.

Attachment

cc: Bill Nitze, State/OES
Suzanne Butcher, State/OES
Eileen Claussen, EPA/OAR

*from
Box 5
59.96.1262
930395*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 23 1988

OFFICE OF
INTERNATIONAL ACTIVITIES

MEMORANDUM

TO: Richard Smith
Acting Assistant Secretary of State for Oceans
and International Environmental and Scientific
Affairs

FROM: *Sheldon Meyers*
Sheldon Meyers
Acting Associate Administrator

SUBJECT: U.S. Financial Contribution to Montreal Protocol

As indicated in the attached communications, UNEP Executive Director Mostafa Tolba has asked each signatory to the Montreal Protocol to help cover the cost of implementing the Protocol over the next three years. Specifically, Dr. Tolba has asked each developed country signatory to contribute \$15,000 per year toward the total estimated cost of between \$250,000 to \$300,000 per year. UNEP will contribute \$25,000 per year; each developing country signatory has been asked to contribute \$10,000.

EPA can contribute \$15,000 for the first year, provided that the State Department covers the U.S. contribution thereafter. The United States, as you know, played a leading role in negotiating this historic global environmental agreement. It is important that we contribute to its successful implementation. Please call me at 382-4870 if you would like to discuss this personally.

Attachment

cc: Bill Nitze, State/OES
Suzanne Butcher, State/OES
Eileen Claussen, EPA/OAR

note
Bx 5
59.96.1262
932395



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

February 22, 1989

SUBJECT: STRATOSPHERIC OZONE PROTECTION POLICY

ISSUES:

- * Should the United States support a phase-out of chlorofluorocarbons (CFCs) and halons?
- * If we are going to support such a phase-out, when should we publicly announce our position?

We recommend that the President announce that the United States supports a phase-out, within the next 15 years, through the Montreal Protocol.

An announcement prior to the March 5-7 London ministerial meeting would be appropriately made by the President, suggesting the Bush Administration's determination to lead on this issue.

If we wait until after the London meeting when several other nations will have espoused such a position, we may wish to consider a lower visibility announcement.

BACKGROUND

The "Montreal Protocol on Substances that Deplete the Ozone Layer" is a landmark international agreement to protect a critical global environmental resource. It has been broadly supported both by industry and environmental groups in the United States and has now been ratified by 34 nations.

The process leading to renegotiating the Protocol has already begun. U. S. industry and several nations have recently announced their support for a phase-out of CFCs and halons. A broad base of support exists for an early and aggressive position by the United States in support of modifying the Protocol to call for a phase-out.

The recent interest in accelerating a phase-out comes from new scientific evidence which has called into question the adequacy of the Protocol's control measures. A study prepared by the world's leading atmospheric researchers (chaired by NASA) concluded that the Antarctic "ozone hole" was due primarily to CFCs and that the ozone layer had already begun to deplete with losses of 1.7-3.0 percent over northern mid-latitudes.

None
B45
59.96.1262
938393

EPA/OFFICE ADMINISTRATOR

FEB 23 '89 12:19

- 2 -

Additional concerns were raised by an EPA study which showed that atmospheric chlorine levels (from CFCs) would increase several times current levels despite the CFC reductions called for by the Protocol. To maintain atmospheric chlorine at current levels, CFCs would have to be totally phased out and methyl chloroform would have to be capped at current levels.

Research reported just last week by NASA and NOAA indicate that chlorine levels in the atmosphere above the Arctic now are 40 to 50 times above normal, a condition likely to lead to significant ozone depletion and reinforcing the urgency of further action.

The CFC producers and users in the United States (many individually and jointly through their trade association) have announced their support for a phase-out of the most harmful CFCs through changes to the Protocol. DuPont, the inventor and largest producer of CFCs, has announced that it will end its production of these chemicals before the end of the century.

The response in other nations has been similar. ICI, Europe's largest CFC producer, has also called for a phase-out through the Protocol. Many nations -- Sweden, Canada, Norway, Denmark and West Germany -- have already announced their plans to phase-out CFCs and halons. The United Kingdom has called for strengthening the Protocol to require at least an 85 percent reduction, and Prime Minister Thatcher is hosting a ministerial conference titled "Saving the Ozone Layer" in early March.

This significant movement in support of a phase-out signals both the serious concerns raised by the new scientific information, but also the substantial progress by industry in developing technological alternatives to CFC and halons. CFC producers are well along in the process of developing and testing chemical substitutes; unless unforeseen difficulties arise, they should have a full line of substitutes available by the year 2000. Industries that rely on CFCs in their products (e.g., refrigerators, electronics, auto air conditioners, many foams) can see their way to producing the same goods without these chemicals.

ISSUES

Issue I: Should the United States support a phase-out of CFCs and halons?

We recommend that the United States move quickly to take a strong position calling for a phase-out of CFCs and halons through the Protocol process.

- 3 -

This policy is consistent with widely held views by both industry and the environmental community. In addition, the adoption of such a policy would reestablish the United States as a major player in the forthcoming meetings at which decisions will be made on whether to strengthen the Protocol.

An early policy announcement would also head off possible action by Congress to move forward on bills calling for a unilateral phase-out in 5-8 years.

We see no negative consequences of adopting a position in support of a phase-out.

After a decision to phase-out, we will need to address the following issues:

- * by what date should the phase-out occur?
- * To what extent are limits on other chlorinated compounds (e.g., methyl chloroform, HCFCs) necessary?

We have initiated several studies to provide an analytical basis for resolving these issues and also will hold a series of meetings with industry and the environmental community in an effort to reach a consensus on these issues.

Issue II: If we support a phase-out, when should the United States announce this?

Pressure is building on the United States to announce its position. The ideal time for an announcement will be just prior to, or at, the ministerial meeting being organized by Prime Minister Thatcher on March 4-6. Over 75 nations will be represented at the ministerial level; many will use this opportunity to announce their position in the upcoming Protocol negotiations.

An announcement before or during the Thatcher meeting would reassert United States leadership on this highly visible international environmental issue. It would also send a strong signal to other nations who have not yet formulated their positions.

Failure to announce a position at or before the London meeting will undoubtedly focus attention on the U.S. reluctance to join West Germany, Canada, the U.K. and others on this issue. Questions will be raised, both at home and abroad, about our commitment to protecting the global environment.

BACKGROUND HIGHLIGHTS ON U.S. CFC POLICY

BACKGROUND

- * In the short time since the Montreal Protocol was signed in September 1987, (and since ratified by 3 dozen nations) new scientific information has demonstrated that greater reductions in chlorofluorocarbons (CFCs) and halons are necessary to halt depletion of the ozone layer.
- * A panel of 100 of the world's leading atmospheric scientists (chaired by NASA) concluded in a summary report released in March 1988 that the large seasonal losses in ozone over Antarctica (the "Antarctic ozone hole") were due primarily to CFCs and that a 1.7-3.0 percent loss in ozone had already occurred over the mid-latitudes in the northern hemisphere.
- * A February 1989 report concluded that the Arctic stratosphere was extremely perturbed because of chlorine levels 40-50 times higher than expected. Although ozone loss is less than in the Antarctic (because of different temperature conditions), the preconditions for severe Arctic ozone loss were found to be present.
- * Despite the 50 percent reduction over the next decade in CFC production now called for in the Protocol, atmospheric levels of chlorine (from the CFCs) will continue to grow to several times current levels.
- * Only a complete phase-out of these chemicals (and possibly limits on other chlorine-containing chemicals) will result in atmospheric chlorine levels being maintained at current levels.

NEW INFORMATION REQUIRES FURTHER RESPONSES

- * The new scientific evidence appears to have answered any remaining doubts concerning the need for stronger measures to safeguard the ozone layer.
- * Industry and governments worldwide have called for revising the Protocol to strengthen its control procedures with many calling for a complete phase-out.
- * DuPont and the other CFC producers in the United States, along with ICI (the largest European producer) have called for a phase-out of CFCs.
- * The trade association representing both the CFC user industries and the producers has also called for renegotiating the Protocol to phase-out CFCs.

- * Several governments, including Norway, Denmark, Sweden, and West Germany, have announced their intention to unilaterally phase-out the production and use of these chemicals.
- * The United Kingdom has called for strengthening the Protocol to require at least an 85 percent reduction and Prime Minister Thatcher is hosting a ministerial conference "Saving the Ozone Layer" in March of this year.

U.S. POSITION SHOULD MOVE TO A PHASE-OUT

- * A solid foundation exists for the United States government to announce its support for a phase-out of CFCs and halons through the Montreal Protocol.
- * The main concern of industry in the United States is that further reductions occur through the Protocol and are not taken unilaterally.
- * Industries that produce products with CFCs (e.g., refrigerators, electronics, car air conditioners, and certain foams) have already begun planning to use chemical substitutes or alternative technologies in response to DuPont's announcement of its intent to stop making CFCs and halons by the end of the century.
- * Any phase-out schedule must allow for CFCs to service existing capital stock (e.g., to service refrigerators or car air conditioners) throughout its useful life.
- * Given the progress in developing technological alternatives and the quantity of CFCs needed to service existing capital, a policy of modifying the Protocol to call for a 95 percent reduction in 1998 with the goal of a complete phase-out within 15 years at the outside seems desirable and feasible.
- * Industry and environmental groups would likely support this and any Administrative measures to achieve widespread international acceptance of a phase-out.
- * By not speeding up the initial stages of the phase-out, industry should have sufficient time to adjust and no significant economic dislocations would be expected.
- * Taking a strong negotiating stance early in the international process would also likely head off Congressional action on several bills that will probably be reintroduced this session calling for a unilateral phase-out within 6-8 years.

OTHER ISSUES

- * Some nations argue that a phase-out of CFCs and halons is not enough.
- * They base this argument on the fact that limits on other chlorine-containing compounds are necessary to reduce atmospheric chlorine to the level that existed before the appearance of the Antarctic ozone hole.
- * We should consider placing a cap at current levels on methyl chloroform; since substitutes already exist for many of its uses, industry would not voice strong opposition.
- * Several of the current and likely future chemical substitutes for the regulated CFCs, also contain chlorine but have substantially shorter atmospheric lifetimes and therefore are far less dangerous to the ozone layer.
- * At least at this time, the United States should argue that the appropriate next step is to phase-out the most dangerous CFCs and halons and it should not support limits (at least in the near term) on these less harmful chlorinated compounds that will replace the regulated CFCs.

STEPS IN THE MONTREAL PROCESS

- * Montreal Protocol entered into force on January 1, 1989.
- * First meeting of the Parties is scheduled for early May of this year.
- * The Protocol calls for periodic assessments to determine if additional restrictions are necessary. In response to the new scientific information, these assessments are already underway with draft reports scheduled to be completed in July/August 1989.
- * The Protocol Parties will meet in September 1989 to review assessment reports and will issue an integrated report with recommendations for changes in October 1989.
- * The United Kingdom has offered to host a meeting of the Parties scheduled for April 1990 at which the Parties will vote to modify the control provisions.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

February 22, 1989

TRANSFERRED FOR DIRECT REPLY:
EPA

SUBJECT: STRATOSPHERIC OZONE PROTECTION POLICY

ISSUES:

- * Should the United States support a phase-out of chlorofluorocarbons (CFCs) and halons?
- * If we are going to support such a phase-out, when should we publicly announce our position?

We recommend that the President announce that the United States supports a phase-out, within the next 15 years, through the Montreal Protocol.

An announcement prior to the March 5-7 London ministerial meeting would be appropriately made by the President, suggesting the Bush Administration's determination to lead on this issue.

If we wait until after the London meeting when several other nations will have espoused such a position, we may wish to consider a lower visibility announcement.

BACKGROUND

The "Montreal Protocol on Substances that Deplete the Ozone Layer" is a landmark international agreement to protect a critical global environmental resource. It has been broadly supported both by industry and environmental groups in the United States and has now been ratified by 34 nations.

The process leading to renegotiating the Protocol has already begun. U. S. industry and several nations have recently announced their support for a phase-out of CFCs and halons. A broad base of support exists for an early and aggressive position by the United States in support of modifying the Protocol to call for a phase-out.

The recent interest in accelerating a phase-out comes from new scientific evidence which has called into question the adequacy of the Protocol's control measures. A study prepared by the world's leading atmospheric researchers (chaired by NASA) concluded that the Antarctic "ozone hole" was due primarily to CFCs and that the ozone layer had already begun to deplete with losses of 1.7-3.0 percent over northern mid-latitudes.

EPA/OFFICE ADMINISTRATOR

FEB 23 '89 12:19

zone
Bak
59.96.1262
930395

- 2 -

Additional concerns were raised by an EPA study which showed that atmospheric chlorine levels (from CFCs) would increase several times current levels despite the CFC reductions called for by the Protocol. To maintain atmospheric chlorine at current levels, CFCs would have to be totally phased out and methyl chloroform would have to be capped at current levels.

Research reported just last week by NASA and NOAA indicate that chlorine levels in the atmosphere above the Arctic now are 40 to 50 times above normal, a condition likely to lead to significant ozone depletion and reinforcing the urgency of further action.

The CFC producers and users in the United States (many individually and jointly through their trade association) have announced their support for a phase-out of the most harmful CFCs through changes to the Protocol. DuPont, the inventor and largest producer of CFCs, has announced that it will end its production of these chemicals before the end of the century.

The response in other nations has been similar. ICI, Europe's largest CFC producer, has also called for a phase-out through the Protocol. Many nations -- Sweden, Canada, Norway, Denmark and West Germany -- have already announced their plans to phase-out CFCs and halons. The United Kingdom has called for strengthening the Protocol to require at least an 85 percent reduction, and Prime Minister Thatcher is hosting a ministerial conference titled "Saving the Ozone Layer" in early March.

This significant movement in support of a phase-out signals both the serious concerns raised by the new scientific information, but also the substantial progress by industry in developing technological alternatives to CFC and halons. CFC producers are well along in the process of developing and testing chemical substitutes; unless unforeseen difficulties arise, they should have a full line of substitutes available by the year 2000. Industries that rely on CFCs in their products (e.g., refrigerators, electronics, auto air conditioners, many foams) can see their way to producing the same goods without these chemicals.

ISSUES

Issue I: Should the United States support a phase-out of CFCs and halons?

We recommend that the United States move quickly to take a strong position calling for a phase-out of CFCs and halons through the Protocol process.

- 3 -

This policy is consistent with widely held views by both industry and the environmental community. In addition, the adoption of such a policy would reestablish the United States as a major player in the forthcoming meetings at which decisions will be made on whether to strengthen the Protocol.

An early policy announcement would also head off possible action by Congress to move forward on bills calling for a unilateral phase-out in 6-8 years.

We see no negative consequences of adopting a position in support of a phase-out.

After a decision to phase-out, we will need to address the following issues:

- * by what date should the phase-out occur?
- * To what extent are limits on other chlorinated compounds (e.g., methyl chloroform, HCFCs) necessary?

We have initiated several studies to provide an analytical basis for resolving these issues and also will hold a series of meetings with industry and the environmental community in an effort to reach a consensus on these issues.

Issue II: If we support a phase-out, when should the United States announce this?

Pressure is building on the United States to announce its position. The ideal time for an announcement will be just prior to, or at, the ministerial meeting being organized by Prime Minister Thatcher on March 4-6. Over 75 nations will be represented at the ministerial level; many will use this opportunity to announce their position in the upcoming Protocol negotiations.

An announcement before or during the Thatcher meeting would reassert United States leadership on this highly visible international environmental issue. It would also send a strong signal to other nations who have not yet formulated their positions.

Failure to announce a position at or before the London meeting will undoubtedly focus attention on the U.S. reluctance to join West Germany, Canada, the U.K. and others on this issue. Questions will be raised, both at home and abroad, about our commitment to protecting the global environment.

BACKGROUND HIGHLIGHTS ON U.S. CFC POLICY

BACKGROUND

- * In the short time since the Montreal Protocol was signed in September 1987, (and since ratified by 3 dozen nations) new scientific information has demonstrated that greater reductions in chlorofluorocarbons (CFCs) and halons are necessary to halt depletion of the ozone layer.
- * A panel of 100 of the world's leading atmospheric scientists (chaired by NASA) concluded in a summary report released in March 1988 that the large seasonal losses in ozone over Antarctica (the "Antarctic ozone hole") were due primarily to CFCs and that a 1.7-3.0 percent loss in ozone had already occurred over the mid-latitudes in the northern hemisphere.
- * A February 1988 report concluded that the Arctic stratosphere was extremely perturbed because of chlorine levels 40-50 times higher than expected. Although ozone loss is less than in the Antarctic (because of different temperature conditions), the preconditions for severe Arctic ozone loss were found to be present.
- * Despite the 50 percent reduction over the next decade in CFC production now called for in the Protocol, atmospheric levels of chlorine (from the CFCs) will continue to grow to several times current levels.
- * Only a complete phase-out of these chemicals (and possibly limits on other chlorine-containing chemicals) will result in atmospheric chlorine levels being maintained at current levels.

NEW INFORMATION REQUIRES FURTHER RESPONSES

- * The new scientific evidence appears to have answered any remaining doubts concerning the need for stronger measures to safeguard the ozone layer.
- * Industry and governments worldwide have called for revising the Protocol to strengthen its control procedures with many calling for a complete phase-out.
- * DuPont and the other CFC producers in the United States, along with ICI (the largest European producer) have called for a phase-out of CFCs.
- * The trade association representing both the CFC user industries and the producers has also called for renegotiating the Protocol to phase-out CFCs.

- * Several governments, including Norway, Denmark, Sweden, and West Germany, have announced their intention to unilaterally phase-out the production and use of these chemicals.
- * The United Kingdom has called for strengthening the Protocol to require at least an 85 percent reduction and Prime Minister Thatcher is hosting a ministerial conference "Saving the Ozone Layer" in March of this year.

U.S. POSITION SHOULD MOVE TO A PHASE-OUT

- * A solid foundation exists for the United States government to announce its support for a phase-out of CFCs and halons through the Montreal Protocol.
- * The main concern of industry in the United States is that further reductions occur through the Protocol and are not taken unilaterally.
- * Industries that produce products with CFCs (e.g., refrigerators, electronics, car air conditioners, and certain foams) have already begun planning to use chemical substitutes or alternative technologies in response to DuPont's announcement of its intent to stop making CFCs and halons by the end of the century.
- * Any phase-out schedule must allow for CFCs to service existing capital stock (e.g., to service refrigerators or car air conditioners) throughout its useful life.
- * Given the progress in developing technological alternatives and the quantity of CFCs needed to service existing capital, a policy of modifying the Protocol to call for a 95 percent reduction in 1998 with the goal of a complete phase-out within 15 years at the outside seems desirable and feasible.
- * Industry and environmental groups would likely support this and any Administrative measures to achieve widespread international acceptance of a phase-out.
- * By not speeding up the initial stages of the phase-out, industry should have sufficient time to adjust and no significant economic dislocations would be expected.
- * Taking a strong negotiating stance early in the international process would also likely head off Congressional action on several bills that will probably be reintroduced this session calling for a unilateral phase-out within 6-8 years.

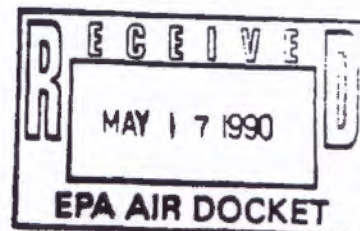
OTHER ISSUES

- * Some nations argue that a phase-out of CFCs and halons is not enough.
- * They base this argument on the fact that limits on other chlorine-containing compounds are necessary to reduce atmospheric chlorine to the level that existed before the appearance of the Antarctic ozone hole.
- * We should consider placing a cap at current levels on methyl chloroform; since substitutes already exist for many of its uses, industry would not voice strong opposition.
- * Several of the current and likely future chemical substitutes for the regulated CFCs, also contain chlorine but have substantially shorter atmospheric lifetimes and therefore are far less dangerous to the ozone layer.
- * At least at this time, the United States should argue that the appropriate next step is to phase-out the most dangerous CFCs and halons and it should not support limits (at least in the near term) on these less harmful chlorinated compounds that will replace the regulated CFCs.

STEPS IN THE MONTREAL PROCESS

- * Montreal Protocol entered into force on January 1, 1989.
- * First meeting of the Parties is scheduled for early May of this year.
- * The Protocol calls for periodic assessments to determine if additional restrictions are necessary. In response to the new scientific information, these assessments are already underway with draft reports scheduled to be completed in July/August 1989.
- * The Protocol Parties will meet in September 1989 to review assessment reports and will issue an integrated report with recommendations for changes in October 1989.
- * The United Kingdom has offered to host a meeting of the Parties scheduled for April 1990 at which the Parties will vote to modify the control provisions.

ENVIRONMENTAL PROTECTION AGENCY

TRANSFERRED FOR
DIRECT REPLY: EPAThe Stratospheric Ozone
Protection Advisory Council

Meeting Summary

The fourth meeting of the Federal Advisory Council of the Stratospheric Ozone Protection Committee, chaired by Eileen Claussen, Director, Office of Atmospheric and Indoor Air Programs, Office of Air and Radiation, USEPA, was held on Tuesday, April 24, 1990. A list of attendees is attached. All of the participants attended the meeting at the Columbia Room, Holiday Inn Capital, 550 C Street, S.W., Washington, D.C.

The purpose of this meeting was for the Federal Advisory Council to discuss the progress of the negotiations on the Montreal Protocol and other issues related to ozone protection. The topics discussed included: (1) the status of negotiations on controls to be placed on the various ozone depleting substances (2) the status of negotiations on technology transfer and financial assistance provisions for developing countries under the Protocol, (3) the recently released ANPRM on CFC recycling, and (4) a possible volunteer labeling program for products containing ozone depleting substances.

1. STATUS OF NEGOTIATIONS ON CONTROLS TO BE PLACED ON OZONE DEPLETING SUBSTANCES

- Eileen Claussen summarized the results of the last set of meetings in Geneva. She explained that at the end of these meetings Tolba put out a "Note by the Executive Director" that described his set of proposals for controlling ozone depleting substances. Ms. Claussen felt it generally followed what the U.S. expects to be the outcome of the negotiations in June.

1.1 Halons

Content of Dr. Tolba's Note:

- 50 percent reduction by 1995.
- 100 percent phaseout by 2000 with an exemption for essential uses.

Other positions expressed in Geneva:

Montreal Photo.
Box 7
59.26.1262
920265

- The Soviet Union was the only country that expressed unhappiness with a phaseout of halons and Ms. Claussen explained that she felt a large part of their concern was the result of a misunderstanding about what the exemption for essential uses included.
- The Nordic countries and the Canadians expressed support for a phaseout by the year 1995 on the assumption that halons in the bank could be used for remaining uses over the next five or more years. Ms. Claussen felt that this position was unlikely to garner enough support to overcome Dr. Tolba's position.

1.2 CFCs

Content of Dr. Tolba's Note:

- 20 percent reduction in 1993.
- 85 percent reduction in 1997.
- 100 percent phaseout in 2000.

Other positions expressed in Geneva:

- While there was general agreement on a 2000 phaseout, the timing of intermediate reductions was discussed a great deal. The Europeans proposed a deeper set of cuts in the initial years and there was a lot of discussion about a 50 percent reduction by 1995 either in addition to or instead of the 1997 reduction. Ms. Claussen stated that the Tolba proposal was likely to be accepted because of the general feeling that it would take some time for substitutes to become available.

1.3 "Other CFCs"

Content of Dr. Tolba's Note:

- 50 percent reduction in 1995.
- 100 percent phaseout in 2000.

Other positions expressed in Geneva:

- The discussion focused on what, if any, CFCs were included in this category. Because it was not clear if any CFCs exist for inclusion in this category, the U.S. is willing to agree to these controls although Ms. Claussen noted that such

controls may not be necessary if no CFCs are identified in this category.

1.4 Carbon Tetrachloride

Content of Dr. Tolba's Note:

- 100 percent phaseout in 1995.

Other positions expressed in Geneva:

- The Soviet Union and Japan both thought the timing of the phaseout should be 2000. Ms. Claussen noted that she felt the reason the Soviets wanted the later date was that they did not understand that feedstock uses would be exempted. She also noted that Dr. Tolba would try to push for 1995 which is acceptable to the U.S.

1.5 Methyl Chloroform

Content of Dr. Tolba's Note:

- Freeze in 1992.
- 25 percent reduction in 1994 (From European Community proposal).
- 50 to 100 percent reduction by 2000 (From U.S. proposal of 25 to 100 percent).

Other positions expressed in Geneva:

- The Nordics prefer a 100 percent phaseout by the year 2000. Ms. Claussen felt that Dr. Tolba was correct that at least a 50 percent reduction in 2000 would be agreed to in June.

1.6 HCFCs

- The U.S. had proposed a split phaseout requiring a phaseout in existing equipment first and then a production phaseout by the middle of the next century.
- The Europeans and other countries were not prepared to deal with this issue in a formal way.
- Japan supports a phaseout by the middle of next century.
- The Nordic countries would like an earlier phaseout date such as 2010 to 2020 and limits on specific uses.

Dr. Tolba suggested that a separate working group be established and that if an Amendment could not be agreed upon, perhaps a Declaration of Intent could be issued. The group that was formed drafted a document but it contained many areas of disagreement. U.S. position is to still push for an Amendment but Ms. Claussen was not sure whether that could be achieved.

1.7 Questions and Comments on Controls Negotiations

- Liz Cook asked for a clarification of what a Declaration of Intent on HCFCs with phaseout dates would mean. Ms. Claussen explained that while a Declaration would not have the weight of an Amendment, it would make it clear that the Parties agreed that some action was required and that an amendment could be considered in the future.
- Tony Vogelsberg questioned how the environmental community and the U.S. regulatory community would view such a Declaration. Ms. Cook stated that Friends of the Earth would prefer to see an Amendment but that the important thing would be how closely industry adhered to what was in a Declaration. David Doniger said he would prefer an Amendment but that in either case it would not affect the push for domestic legislation (which presently includes a phaseout of HCFCs) and thus U.S. industry should prefer an amendment because then all countries will then be operating according to the same rules. Ms. Claussen stated that the administration basically agreed with that analysis and that the key nations that needed to reach an agreement were the Europeans.
- Mr. Doniger added the comment that the content of the Declaration would be as important as whether it was a Declaration or an Amendment.
- Ms. Claussen noted that the Soviet Union had also expressed that although they recognized HCFCs as a transitional substitute they preferred a Declaration for a variety of reasons.
- Tony Vogelsberg raised the concern that a target date that appears too early to the less developed countries could diminish their compliance with the Protocol because they do not want to switch to something that will be available only for a short period to time. Ms. Claussen pointed out that the

developing countries have not focused on the controls in the negotiations (and hence the future availability of HCFCs) but have focused on other issues such as financing.

- Carol Niemi asked if there had been any recent signatories to the Protocol. Ms. Claussen answered that there are now 53 parties, of which 23 are developing countries. She also stated that Brazil and Argentina are in process and may be parties before June, but that China and India would not likely become parties before there is some commitment on financial assistance. Ms. Niemi asked about Korea and Taiwan. Ms. Claussen explained that Taiwan was a special case and was not allowed to be a signatory but that it appeared they would follow the Protocol and that she was not aware of the Korean position.
- Alan Miller asked if concerns about the potential availability of HCFCs in developing countries is limited to certain markets. Mr. Vogelsberg stated that he felt developing countries are most concerned about the refrigeration and certain critical air conditioning as well as the insulation used in these applications. Mr. Doniger commented that although he felt this was a real concern, he had not heard it expressed by governmental representatives from developing countries.
- Mr. Vogelsberg commented that a non-emission technology seemed to be needed because any compound seems to cause either ground level problems or have a lifetime long enough to contribute to ozone or warming problems.
- Mr. Vogelsberg and Jerry Stofflet raised the question of trying to set the timing of the reduction schedule so as to maintain a link to the future by allowing current equipment to be serviced. Mr. Stofflet expressed concern that even with recycling starting immediately, there would not be enough of a pool for servicing equipment after 2000. Ms. Claussen responded that the amount of equipment using CFCs would start to be reduced before 2000 so that some later production would not be needed for new equipment and hence be available for existing equipment.
- Ms. Cook stated that Friends of the Earth would see the June meeting as a failure unless it is agreed

that methyl chloroform will be phased out by 2000. She also asked what the Administration's position would be with respect to a methyl chloroform phaseout. Ms. Claussen responded that the Administration's position was not finalized, and was related to the Clean Air Bill recently passed by the Senate and under consideration in the House that calls for a phaseout by 2000. If this passes, then the Administration would not try to negotiate a different position, but if it does not pass before the June meeting then the Administration will have more flexibility in its negotiating position.

- Mr. Smukowski raised concerns about a 100 percent phaseout of methyl chloroform as the Clean Air Act comes into effect. Ms. Claussen said that while the administration position was not finalized, internationally it would not be sensible to negotiate a position different than the one agreed to by the House and Senate. He raised the need for coordination in different fields to achieve all the goals. There was general agreement that innovations are needed and that one does not necessarily need to know their source in order to plan for the future. Mr. Garabedian raised the point that at the local level, citizens are concerned about all of the problems and want whatever is necessary to be done.
- A discussion followed about the coordination between state, local, and Federal programs with some agreement that a uniform federal rule was much more desirable in terms of efficiency of resource allocation than a patchwork of different state and local regulations. Mr. Garabedian pointed out that the only way to keep state and local governments from creating different regulations is to have a strong Federal program.

2. STATUS OF NEGOTIATIONS ON FINANCING AND TECHNOLOGY TRANSFER FOR DEVELOPING COUNTRIES

- Ms. Claussen provided a summary of the negotiations in Geneva on financing and technology transfer for developing countries. She indicated that many of the representatives for the countries present did not have clear instructions on what their positions should be, and reflected this by indicating discussions would have to be held in capitols before agreement can be reached.

2.1 Institutions

- Ms. Claussen stated that a consensus existed at the meeting that existing institutions would be used instead of a new single fund. The World Bank was the financial institution of choice and UNDP and the UNEP Paris office were suggested as sources of technical assistance.
- It was also generally agreed that the mechanism should not be too unwieldy and that only a small oversight committee should be used to administer the program through the existing organizations.

2.2 Size of Fund

- Ms. Claussen explained that Dr. Tolba had wanted a total dollar figure to be decided at the meeting in Geneva. But after several consultants gave presentations, a general agreement was reached that a number for the next 20 years was not possible.
- It was decided to work on three year planning cycles and at present to identify the costs involved in the next three years.
- Through communication with Washington, some calculations were done to determine a rough figure for the first three years. The case studies in progress were used as a basis to extrapolate what costs would be involved in the next three years for both CFC and halon producing and using facilities in developing countries.
- The figure that was roughly estimated was \$100 million spread over the three years for countries that are now parties to the Protocol. Ms. Claussen noted that not all the money would likely be spent because of the time it takes to get projects going, and also noted that the figure might double if China and India were included.
- Mr. Vogelsberg expressed support for the number in light of the types of projects he thought would initially be needed such as conservation and recycling equipment.

2.3 Source of Funding

- Ms. Claussen reported that a lot of discussion centered on whether contributions to the fund should be voluntary or mandatory. She noted that the U.S. position is that contributions should be voluntary.
- Ms. Claussen reported that there was some discussion over how the burden of the funding should be

distributed. One option was to use the standard U.N. scale in which the U.S. pays 25 percent.

- Another option to distribute the funding burden is according to a country's percent of contribution to ozone depletion based on its 1986 consumption of CFCs. There was some support for this proposal but also some concern about the precedent this would set for other environmental projects.
- The role of bilateral funding was also discussed because some countries wanted to be able to maintain special relationships which already existed and take advantage of a streamlined process. The disadvantage that was raised was that if too much funding was done bilaterally the distribution of funds would not be as efficient.

2.4 Use of Funding

- Ms. Claussen said that most of the discussion had centered on what the funding would actually be spent on and she distributed a draft of a paper presented in Nairobi that had tried to define the kinds of incremental costs that would be included.
- Ms. Claussen speculated that the most that could be expected to come out of the June meeting was an agreement in principle that the donor countries will make some commitment of funds which will not be very large at first. She also explained that she expects a working group to be established to hammer out the specifics of how the fund will operate.

2.5 Complications

- Ms. Claussen guessed that many of the donor countries were concerned about the precedent that a large contribution to this fund might set for other issues, although none were opposed to the notion that the fund would be supplied from additional resources.
- There was also concern that "the green fund" which the World Bank is now discussing, could make the negotiations for the Protocol fund more difficult because the World Bank fund is expected to be very large in comparison and could make developing countries less likely to accept the smaller size of the fund proposed with the Protocol.
- Mr. Miller asked if the World Bank fund would be part of the negotiations at the June meeting. Ms. Claussen

2.6 Questions and Comments

- Mr. Miller also asked if other developing countries have participated in the negotiations or if only Dr. Tolba has been present. Ms. Claussen reassured him that other countries such as Mexico, Brazil, China, and India have all played a role and she gave a brief history of their positions.
- Mr. Miller asked further if India and Brazil had clarified their positions. Ms. Claussen responded that she thought Brazil would accept a proposal similar to the one she had outlined, but that India continued to state that they want to decide how they would spend the sum of money which they were allotted. She did not have a feeling for what would ultimately be acceptable to India. She also reported that she thought China would find the proposed funding acceptable.
- Ms. Hall asked if Ms. Claussen thought these funding issues had the potential to be deal breakers. Ms. Claussen responded that it very well could be a major sticking point but that one strategy to deal with it would be to combine all the amendments into one bundle so that developing countries must accept all the conditions in order to receive any funding.
- Mr. Likes asked if countries are more concerned with items specific to their country than the total amount of funding. Ms. Claussen responded that it was difficult to tell because while the countries realize the amount does not need to be very large to begin with, they want a commitment for future projects.
- Ms. Hall asked how the East Block fit into the scheme. Ms. Claussen responded that they had a problem as donors because they do not have exchangeable currencies and they would not receive money from the fund.
- Ms. Hall expressed the thought that if this was a potential deal breaking point going into the negotiations, would it not be a good idea to put off finalizing agreement on it for a few months. Ms. Claussen responded that she thought the meeting would be a failure if some decisions on some items were not made in June.

- Ms. Cook raised the point that the problem with the UN scale being used for determining donor contributions is that some developing countries would be required to make larger contributions than developed countries. Ms. Claussen expressed agreement that this was a problem and it had been discussed.
- Mr. Smukowski offered that in his experience with waste and source reduction programs there are five phases of funding that correspond to steps that need to be taken. He said that initially people think they need more money than they do and they can not spend it all. Then the costs build to a peak and once the program gains better focus the funding needs drop back down.
- Mr. Vogelsburg raised the issue of whether technology transfer could be another possible sticking point. Ms. Claussen responded that she was unsure because she and other people have had a problem deciding what technology transfer means.
- Mr. Smukowski asked how the U.S. planned to bank the technology and whether there would be some sort of offsets for technology versus funding. Discussion continued as the possible use of these offsets in trading with the East Block were discussed.
- Mr. Feder asked if the technology transfer issue was a Dr. Tolba initiative or if it was pushed by other countries. Ms. Claussen responded that India keeps talking about a blank check and free technology. She pointed out that it took a while for people to understand that governments do not own the technology and she hoped that would be clarified at the meeting.
- Mr. De Canio raised the need for a tangible commitment of funds by the U.S. to avoid the dynamics of the budget process from becoming a problem. There was general agreement that this was true and that it should be possible since the initial amounts of money are small.
- Mr. Smukowski raised the possibility of increasing the data reporting requirements to avoid having the funds dissipated as they funnel through governments. Ms. Claussen agreed with the need to avoid having the funds wasted but doubted that increasing the data requirements would be the way to achieve this.
- Mr. Likes asked if there were any estimates of the fund costs after the first three years. Ms. Claussen responded that it was difficult to come up with those

numbers and referred to the estimates of costs for the phaseout in the U.S. She also noted that some members would like to put a cap on it but she felt that there was so much uncertainty that even that would be hard to do. Mr. De Canio noted that many cost estimates will be revised down as new technology becomes more available and that this had already happened to some degree.

- Mr. Smukowski asked if the cost estimates included operating costs such as might result from increased drying time. Ms. Claussen responded that while some attempt was made to include these costs, they are only estimates.

3. CFC RECYCLING

3.1 ANPRM

- Mr. Lee stated that the ANPRM for recycling was recently signed, and noted that its release took longer than expected because the topic drew a lot of attention from people within the government and EPA.
- The first half of the ANPRM discusses the need for recycling, focusing on EPA's perception of these needs. It then describes methods for developing regulations to implement a recycling program and identifies outstanding issues that need to be dealt with such as issues of compliance and preemption.
- The second half of the ANPRM addresses the technical aspects of recycling within the individual sectors. Issues are raised in the following sectors: mobile air conditioning, stationary air conditioning and refrigeration, solvents, halons, and sterilization.
- Mr. Lee stated that comments from committee members addressing the issues would be very helpful. Ms. Claussen added that, assuming EPA decided to go forward with recycling rules, it would be beneficial to receive comments on the ANPRM as early as possible so EPA could move quickly to the next step in the rulemaking process. Mr. Lee stated that there was a 60 day comment period on the ANPRM.

3.2 Goals of Recycling Program

- Mr. Lee described the first goal of the program as a reduction in the amount of chlorine in the atmosphere which could be achieved through recycling and declamation.

- The second goal for recycling was to provide a reservoir pool of recycled CFCs which could be used in existing equipment. This would extend the lifetimes of machines, that may be retired early if no CFCs were available in the year 2000. Mr. Lee pointed out that substantial regulatory activity was occurring on the state level indicating the likelihood of success for a recycling program.

3.3 Implementation

- Mr. Lee said the most common method discussed by EPA was direct regulation, where the agency asked particular sectors to report their use, capture and recycle of CFCs, and use equipment that meets specifications.
- Another approach is the use of market incentives involving a deposit refund system. Under this method people buying CFCs pay a distributor a deposit for the use of CFCs. Following the use of the CFCs, the purchaser would reclaim and return them to the distributor to obtain a refund. This would raise the price of CFCs.
- Non-regulatory programs were the final option discussed. Mr. Lee said that this might work in some sectors like halons and the salvage industry.
- Mr. Lee explained EPA's most likely approach will be to develop a program on a sector by sector basis. He stated that it was not EPA's intention to come out with a great big package that addressed recycling in all areas, but instead they will look at individual sectors, identifying sectors such as, automobile air conditioning, and stationary refrigeration and air conditioning, where regulation can move quickly. These sectors experienced rapid changes in technology which would allow EPA to develop more detailed regulatory programs. Other sectors, which need further study, were effectively put on hold while EPA reviewed them to see if voluntary programs were more suitable.

3.4 Issues Raised by ANPRM

- The first issue described by Mr. Lee was private-public sector relations. This involves what type of program is implemented.
- The second major issue was one of preemption especially concerning the current Clean Air Act.

- The final issue he raised was compliance. The problems which will arise under this issue included: how do you monitor compliance, do you require people to have equipment on site, do you require certification and training programs, and do you require annual reporting to the EPA. A final issue which related to compliance was the relationship between the federal, regional, and state governments in developing effective compliance programs.

3.5 Questions and Comments

- Mr. Doniger expressed concern about EPA's ability to keep things on track. He asked whether the ANPRM included a schedule of EPA actions in both areas where they want to implement direct regulations and in areas that they wanted to put on hold.
- Mr. Lee responded that in areas where direct regulation was appropriate they laid out dates while in sectors such as, solvents, the ANPRM did not mention dates.
- Mr. Doniger asked if there were any problem areas where the members of the Advisory Committee might help alleviate any roadblocks in the regulatory process. He thought that this was possible because the members of the Advisory Committee, along with the users, want the supply extended through recycling.
- Mr. Smukowski expressed a concern that the information on EPA recycling regulations would not reach equipment designers. He asked EPA to target education as a goal and solicit reactions from mechanical standards groups.
- Mr. Lee stated that EPA was working closely with ASHRAE, and ARI.
- Mr. Vogelsberg thought that the CFC tax preempted any fee for deposit used in recycling programs. He also expressed a need for EPA to increase the knowledge of any recycling program to all areas of the government in an attempt to increase the number of government groups volunteering to return materials to industry.
- Mr. Likes supported an accelerated rate of work specifying standards for what reclamation equipment should do.
- Mr. Vogelsburg pointed out that by implementing a national program the US will initiate the development of new technology which it can sell to other countries. He believed that this is one of the most compelling reasons for implementing a recycling program quickly.

- Ms. Cook expressed concern about a voluntary deposit system because people could circumvent the program easily and keep emitting the chemicals. She believed a mandatory program was more wise.

4. VOLUNTARY LABELING PROGRAM

- David Lee raised the issue that many products are advertized as ozone safe, yet still deplete ozone -- although at a lower rate than the products they replace. EPA is developing a set of voluntary labeling guidelines, which have four main objectives:

4.1 Objectives of Labeling Guidelines

- The labeling program would 1) assist in phase-out reductions of ozone depleting chemicals, 2) clarify and standardize the ozone safe labeling of products, 3) ensure honest advertizing, and 4) provide an incentive for producers to develop ozone safe goods.

4.2 Scope and Method

- Labeling would be voluntary, and would consist of positive identifications of goods as ozone "safe," "friendly," or "friendlier," according to some criteria. These criteria should be kept simple, and apply only to products containing CFCs. EPA is working with the FTC to develop a formal proposal for the program.

4.3 Current Labeling Requirements

- Mr. Garabedian asked if there are any provisions for labeling CFCs, and Mr. Doniger replied that there are such requirements only for aerosols that were exempted from the CFC ban.
- Mr. Garabedian noted a negative labeling provision that applies to R-12 (refrigerator) cans.

4.4 Affects of Labeling on Producers and Consumers

- Mr. Vogelsberg argued that, for labeling to have merit, there must first be viable substitute options open to the manufacturer. Otherwise labeling may wrongfully dissuade a consumer from buying a product.

- Ms. Cook responded that, because of widespread misconceptions about CFCs, labeling and recycling are needed to educate the public.
- Mr. Doniger expressed concern that labels should not be focussed solely on ozone depletion, but on overall environmental safety. Ozone safe labels should not weaken the current proposals for negative labeling.

4.5 Legal Logistics of Labeling

- Ms. Aulisio asked if federal labeling would preempt state provisions, and how a specific, nationwide labeling language would be developed. Mr. Soorus felt strongly that there should be federal preemption to avoid higher prices, market contortions, and conflicting standards.
- Mr. Garabedian objected to preemption, saying that provisions should work together because they have the same intent, and that the message in the labels was more important than the wording.
- Mr. Smukowski said it was important to consider the many and complex labeling requirements that some manufacturers must follow.
- Ms. Cook stressed the need for continuity in standards and language for labels.
- Ms. Aulisio noted how there may develop confusion as to what are actual versus what are only perceived voluntary guidelines.

4.6 Items of General Concern

- Mr. Vogelsberg affirmed that the main objective was to encourage the elimination of CFCs, and therefore it may be counterproductive to negatively label an HCFC product. Mr. Doniger disagreed, and cited McDonald's safe packaging campaign.

5. OTHER

- Ms. Aulisio expressed concern about the handling and processing issue due to what she perceived as a lack of communication between EPA's Air Office and Toxics office. This initiated a discussion of the pros and cons of listing CFCs and Halons under SARA Title III.

- Mr. Doniger stated that the main purpose for listing these chemical was to get an annual report of the total quantity of halons and CFCs released into each of the various media.
- Mr. Smukowski, Mr. Soorus, and Mr. Vogelsberg believed that the listing Under Title III would unnecessarily increase the amount of paperwork and cost without reducing emissions, furthermore, since releases were only reported above certain thresholds the annual reports would be misrepresentative. Mr. Doniger countered that reporting requirements motivated companies to investigate their own inventories increasing awareness. Another purpose the reported numbers served was to draw attention to emissions which in turn drew attention to the problem.

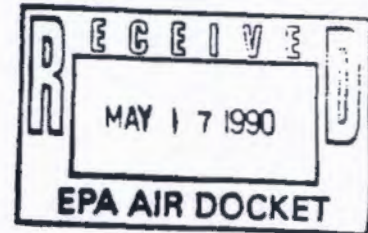
ATTENDEES

Eileen Claussen, Chairperson
Karla Perri
David Lee
Steven De Canio
Alan Miller
Carol Niemi
Khristine Hall
Tony Vogelsberg
Peter Likes
Leo Soorus
Paul Dugard
Liz Cook
Lorraine Aulisio
David Doniger
Richard Smith
Peter Wychoff
Harold Garabedian
Jerry Stofflet
Raymond Feder
Gert Baumann
David Smukowski

ENVIRONMENTAL PROTECTION AGENCY

The Stratospheric Ozone
Protection Advisory Council

Meeting Summary



The fourth meeting of the Federal Advisory Council of the Stratospheric Ozone Protection Committee, chaired by Eileen Claussen, Director, Office of Atmospheric and Indoor Air Programs, Office of Air and Radiation, USEPA, was held on Tuesday, April 24, 1990. A list of attendees is attached. All of the participants attended the meeting at the Columbia Room, Holiday Inn Capital, 550 C Street, S.W., Washington, D.C.

The purpose of this meeting was for the Federal Advisory Council to discuss the progress of the negotiations on the Montreal Protocol and other issues related to ozone protection. The topics discussed included: (1) the status of negotiations on controls to be placed on the various ozone depleting substances (2) the status of negotiations on technology transfer and financial assistance provisions for developing countries under the Protocol, (3) the recently released ANPRM on CFC recycling, and (4) a possible volunteer labeling program for products containing ozone depleting substances.

1. STATUS OF NEGOTIATIONS ON CONTROLS TO BE PLACED ON OZONE DEPLETING SUBSTANCES

- Eileen Claussen summarized the results of the last set of meetings in Geneva. She explained that at the end of these meetings Tolba put out a "Note by the Executive Director" that described his set of proposals for controlling ozone depleting substances. Ms. Claussen felt it generally followed what the U.S. expects to be the outcome of the negotiations in June.

1.1 Halons

Content of Dr. Tolba's Note:

- 50 percent reduction by 1995.
- 100 percent phaseout by 2000 with an exemption for essential uses.

Other positions expressed in Geneva:

Montreal Photo.
Box 7
59.76.1262
720.245

- The Soviet Union was the only country that expressed unhappiness with a phaseout of halons and Ms. Claussen explained that she felt a large part of their concern was the result of a misunderstanding about what the exemption for essential uses included.
- The Nordic countries and the Canadians expressed support for a phaseout by the year 1995 on the assumption that halons in the bank could be used for remaining uses over the next five or more years. Ms. Claussen felt that this position was unlikely to garner enough support to overcome Dr. Tolba's position.

1.2 CFCs

Content of Dr. Tolba's Note:

- 20 percent reduction in 1993.
- 85 percent reduction in 1997.
- 100 percent phaseout in 2000.

Other positions expressed in Geneva:

- While there was general agreement on a 2000 phaseout, the timing of intermediate reductions was discussed a great deal. The Europeans proposed a deeper set of cuts in the initial years and there was a lot of discussion about a 50 percent reduction by 1995 either in addition to or instead of the 1997 reduction. Ms. Claussen stated that the Tolba proposal was likely to be accepted because of the general feeling that it would take some time for substitutes to become available.

1.3 "Other CFCs"

Content of Dr. Tolba's Note:

- 50 percent reduction in 1995.
- 100 percent phaseout in 2000.

Other positions expressed in Geneva:

- The discussion focused on what, if any, CFCs were included in this category. Because it was not clear if any CFCs exist for inclusion in this category, the U.S. is willing to agree to these controls although Ms. Claussen noted that such

controls may not be necessary if no CFCs are identified in this category.

1.4 Carbon Tetrachloride

Content of Dr. Tolba's Note:

- 100 percent phaseout in 1995.

Other positions expressed in Geneva:

- The Soviet Union and Japan both thought the timing of the phaseout should be 2000. Ms. Claussen noted that she felt the reason the Soviets wanted the later date was that they did not understand that feedstock uses would be exempted. She also noted that Dr. Tolba would try to push for 1995 which is acceptable to the U.S.

1.5 Methyl Chloroform

Content of Dr. Tolba's Note:

- Freeze in 1992.
- 25 percent reduction in 1994 (From European Community proposal).
- 50 to 100 percent reduction by 2000 (From U.S. proposal of 25 to 100 percent).

Other positions expressed in Geneva:

- The Nordics prefer a 100 percent phaseout by the year 2000. Ms. Claussen felt that Dr. Tolba was correct that at least a 50 percent reduction in 2000 would be agreed to in June.

1.6 HCFCs

- The U.S. had proposed a split phaseout requiring a phaseout in existing equipment first and then a production phaseout by the middle of the next century.
- The Europeans and other countries were not prepared to deal with this issue in a formal way.
- Japan supports a phaseout by the middle of next century.
- The Nordic countries would like an earlier phaseout date such as 2010 to 2020 and limits on specific uses.

• Dr. Tolba suggested that a separate working group be established and that if an Amendment could not be agreed upon, perhaps a Declaration of Intent could be issued. The group that was formed drafted a document but it contained many areas of disagreement. U.S. position is to still push for an Amendment but Ms. Claussen was not sure whether that could be achieved.

1.7 Questions and Comments on Controls Negotiations

- Liz Cook asked for a clarification of what a Declaration of Intent on HCFCs with phaseout dates would mean. Ms. Claussen explained that while a Declaration would not have the weight of an Amendment, it would make it clear that the Parties agreed that some action was required and that an amendment could be considered in the future.
- Tony Vogelsberg questioned how the environmental community and the U.S. regulatory community would view such a Declaration. Ms. Cook stated that Friends of the Earth would prefer to see an Amendment but that the important thing would be how closely industry adhered to what was in a Declaration. David Doniger said he would prefer an Amendment but that in either case it would not affect the push for domestic legislation (which presently includes a phaseout of HCFCs) and thus U.S. industry should prefer an amendment because then all countries will then be operating according to the same rules. Ms. Claussen stated that the administration basically agreed with that analysis and that the key nations that needed to reach an agreement were the Europeans.
- Mr. Doniger added the comment that the content of the Declaration would be as important as whether it was a Declaration or an Amendment.
- Ms. Claussen noted that the Soviet Union had also expressed that although they recognized HCFCs as a transitional substitute they preferred a Declaration for a variety of reasons.
- Tony Vogelsberg raised the concern that a target date that appears too early to the less developed countries could diminish their compliance with the Protocol because they do not want to switch to something that will be available only for a short period to time. Ms. Claussen pointed out that the

developing countries have not focused on the controls in the negotiations (and hence the future availability of HCFCs) but have focused on other issues such as financing.

- Carol Niemi asked if there had been any recent signatories to the Protocol. Ms. Claussen answered that there are now 53 parties, of which 23 are developing countries. She also stated that Brazil and Argentina are in process and may be parties before June, but that China and India would not likely become parties before there is some commitment on financial assistance. Ms. Niemi asked about Korea and Taiwan. Ms. Claussen explained that Taiwan was a special case and was not allowed to be a signatory but that it appeared they would follow the Protocol and that she was not aware of the Korean position.
- Alan Miller asked if concerns about the potential availability of HCFCs in developing countries is limited to certain markets. Mr. Vogelsberg stated that he felt developing countries are most concerned about the refrigeration and certain critical air conditioning as well as the insulation used in these applications. Mr. Doniger commented that although he felt this was a real concern, he had not heard it expressed by governmental representatives from developing countries.
- Mr. Vogelsberg commented that a non-emission technology seemed to be needed because any compound seems to cause either ground level problems or have a lifetime long enough to contribute to ozone or warming problems.
- Mr. Vogelsberg and Jerry Stofflet raised the question of trying to set the timing of the reduction schedule so as to maintain a link to the future by allowing current equipment to be serviced. Mr. Stofflet expressed concern that even with recycling starting immediately, there would not be enough of a pool for servicing equipment after 2000. Ms. Claussen responded that the amount of equipment using CFCs would start to be reduced before 2000 so that some later production would not be needed for new equipment and hence be available for existing equipment.
- Ms. Cook stated that Friends of the Earth would see the June meeting as a failure unless it is agreed

that methyl chloroform will be phased out by 2000. She also asked what the Administration's position would be with respect to a methyl chloroform phaseout. Ms. Claussen responded that the Administration's position was not finalized, and was related to the Clean Air Bill recently passed by the Senate and under consideration in the House that calls for a phaseout by 2000. If this passes, then the Administration would not try to negotiate a different position, but if it does not pass before the June meeting then the Administration will have more flexibility in its negotiating position.

- Mr. Smukowski raised concerns about a 100 percent phaseout of methyl chloroform as the Clean Air Act comes into effect. Ms. Claussen said that while the administration position was not finalized, internationally it would not be sensible to negotiate a position different than the one agreed to by the House and Senate. He raised the need for coordination in different fields to achieve all the goals. There was general agreement that innovations are needed and that one does not necessarily need to know their source in order to plan for the future. Mr. Garabedian raised the point that at the local level, citizens are concerned about all of the problems and want whatever is necessary to be done.
- A discussion followed about the coordination between state, local, and Federal programs with some agreement that a uniform federal rule was much more desirable in terms of efficiency of resource allocation than a patchwork of different state and local regulations. Mr. Garabedian pointed out that the only way to keep state and local governments from creating different regulations is to have a strong Federal program.

2. STATUS OF NEGOTIATIONS ON FINANCING AND TECHNOLOGY TRANSFER FOR DEVELOPING COUNTRIES

- Ms. Claussen provided a summary of the negotiations in Geneva on financing and technology transfer for developing countries. She indicated that many of the representatives for the countries present did not have clear instructions on what their positions should be, and reflected this by indicating discussions would have to be held in capitols before agreement can be reached.

2.1 Institutions

- Ms. Claussen stated that a consensus existed at the meeting that existing institutions would be used instead of a new single fund. The World Bank was the financial institution of choice and UNDP and the UNEP Paris office were suggested as sources of technical assistance.
- It was also generally agreed that the mechanism should not be too unwieldy and that only a small oversight committee should be used to administer the program through the existing organizations.

2.2 Size of Fund

- Ms. Claussen explained that Dr. Tolba had wanted a total dollar figure to be decided at the meeting in Geneva. But after several consultants gave presentations, a general agreement was reached that a number for the next 20 years was not possible.
- It was decided to work on three year planning cycles and at present to identify the costs involved in the next three years.
- Through communication with Washington, some calculations were done to determine a rough figure for the first three years. The case studies in progress were used as a basis to extrapolate what costs would be involved in the next three years for both CFC and halon producing and using facilities in developing countries.
- The figure that was roughly estimated was \$100 million spread over the three years for countries that are now parties to the Protocol. Ms. Claussen noted that not all the money would likely be spent because of the time it takes to get projects going, and also noted that the figure might double if China and India were included.
- Mr. Vogelsberg expressed support for the number in light of the types of projects he thought would initially be needed such as conservation and recycling equipment.

2.3 Source of Funding

- Ms. Claussen reported that a lot of discussion centered on whether contributions to the fund should be voluntary or mandatory. She noted that the U.S. position is that contributions should be voluntary.
- Ms. Claussen reported that there was some discussion over how the burden of the funding should be

distributed. One option was to use the standard U.N. scale in which the U.S. pays 25 percent.

- Another option to distribute the funding burden is according to a country's percent of contribution to ozone depletion based on its 1986 consumption of CFCs. There was some support for this proposal but also some concern about the precedent this would set for other environmental projects.
- The role of bilateral funding was also discussed because some countries wanted to be able to maintain special relationships which already existed and take advantage of a streamlined process. The disadvantage that was raised was that if too much funding was done bilaterally the distribution of funds would not be as efficient.

2.4 Use of Funding

- Ms. Claussen said that most of the discussion had centered on what the funding would actually be spent on and she distributed a draft of a paper presented in Nairobi that had tried to define the kinds of incremental costs that would be included.
- Ms. Claussen speculated that the most that could be expected to come out of the June meeting was an agreement in principle that the donor countries will make some commitment of funds which will not be very large at first. She also explained that she expects a working group to be established to hammer out the specifics of how the fund will operate.

2.5 Complications

- Ms. Claussen guessed that many of the donor countries were concerned about the precedent that a large contribution to this fund might set for other issues, although none were opposed to the notion that the fund would be supplied from additional resources.
- There was also concern that "the green fund" which the World Bank is now discussing, could make the negotiations for the Protocol fund more difficult because the World Bank fund is expected to be very large in comparison and could make developing countries less likely to accept the smaller size of the fund proposed with the Protocol.
- Mr. Miller asked if the World Bank fund would be part of the negotiations at the June meeting. Ms. Claussen

2.6 Questions and Comments

- Mr. Miller also asked if other developing countries have participated in the negotiations or if only Dr. Tolba has been present. Ms. Claussen reassured him that other countries such as Mexico, Brazil, China, and India have all played a role and she gave a brief history of their positions.
- Mr. Miller asked further if India and Brazil had clarified their positions. Ms. Claussen responded that she thought Brazil would accept a proposal similar to the one she had outlined, but that India continued to state that they want to decide how they would spend the sum of money which they were allotted. She did not have a feeling for what would ultimately be acceptable to India. She also reported that she thought China would find the proposed funding acceptable.
- Ms. Hall asked if Ms. Claussen thought these funding issues had the potential to be deal breakers. Ms. Claussen responded that it very well could be a major sticking point but that one strategy to deal with it would be to combine all the amendments into one bundle so that developing countries must accept all the conditions in order to receive any funding.
- Mr. Likes asked if countries are more concerned with items specific to their country than the total amount of funding. Ms. Claussen responded that it was difficult to tell because while the countries realize the amount does not need to be very large to begin with, they want a commitment for future projects.
- Ms. Hall asked how the East Block fit into the scheme. Ms. Claussen responded that they had a problem as donors because they do not have exchangeable currencies and they would not receive money from the fund.
- Ms. Hall expressed the thought that if this was a potential deal breaking point going into the negotiations, would it not be a good idea to put off finalizing agreement on it for a few months. Ms. Claussen responded that she thought the meeting would be a failure if some decisions on some items were not made in June.

- Ms. Cook raised the point that the problem with the UN scale being used for determining donor contributions is that some developing countries would be required to make larger contributions than developed countries. Ms. Claussen expressed agreement that this was a problem and it had been discussed.
- Mr. Smukowski offered that in his experience with waste and source reduction programs there are five phases of funding that correspond to steps that need to be taken. He said that initially people think they need more money than they do and they can not spend it all. Then the costs build to a peak and once the program gains better focus the funding needs drop back down.
- Mr. Vogelsburg raised the issue of whether technology transfer could be another possible sticking point. Ms. Claussen responded that she was unsure because she and other people have had a problem deciding what technology transfer means.
- Mr. Smukowski asked how the U.S. planned to bank the technology and whether there would be some sort of offsets for technology versus funding. Discussion continued as the possible use of these offsets in trading with the East Block were discussed.
- Mr. Feder asked if the technology transfer issue was a Dr. Tolba initiative or if it was pushed by other countries. Ms. Claussen responded that India keeps talking about a blank check and free technology. She pointed out that it took a while for people to understand that governments do not own the technology and she hoped that would be clarified at the meeting.
- Mr. De Canio raised the need for a tangible commitment of funds by the U.S. to avoid the dynamics of the budget process from becoming a problem. There was general agreement that this was true and that it should be possible since the initial amounts of money are small.
- Mr. Smukowski raised the possibility of increasing the data reporting requirements to avoid having the funds dissipated as they funnel through governments. Ms. Claussen agreed with the need to avoid having the funds wasted but doubted that increasing the data requirements would be the way to achieve this.
- Mr. Likes asked if there were any estimates of the fund costs after the first three years. Ms. Claussen responded that it was difficult to come up with those

numbers and referred to the estimates of costs for the phaseout in the U.S. She also noted that some members would like to put a cap on it but she felt that there was so much uncertainty that even that would be hard to do. Mr. De Canio noted that many cost estimates will be revised down as new technology becomes more available and that this had already happened to some degree.

- Mr. Smukowski asked if the cost estimates included operating costs such as might result from increased drying time. Ms. Claussen responded that while some attempt was made to include these costs, they are only estimates.

3. CFC RECYCLING

3.1 ANPRM

- Mr. Lee stated that the ANPRM for recycling was recently signed, and noted that its release took longer than expected because the topic drew a lot of attention from people within the government and EPA.
- The first half of the ANPRM discusses the need for recycling, focusing on EPA's perception of these needs. It then describes methods for developing regulations to implement a recycling program and identifies outstanding issues that need to be dealt with such as issues of compliance and preemption.
- The second half of the ANPRM addresses the technical aspects of recycling within the individual sectors. Issues are raised in the following sectors: mobile air conditioning, stationary air conditioning and refrigeration, solvents, halons, and sterilization.
- Mr. Lee stated that comments from committee members addressing the issues would be very helpful. Ms. Claussen added that, assuming EPA decided to go forward with recycling rules, it would be beneficial to receive comments on the ANPRM as early as possible so EPA could move quickly to the next step in the rulemaking process. Mr. Lee stated that there was a 60 day comment period on the ANPRM.

3.2 Goals of Recycling Program

- Mr. Lee described the first goal of the program as a reduction in the amount of chlorine in the atmosphere which could be achieved through recycling and dechlorination.

- The second goal for recycling was to provide a reservoir pool of recycled CFCs which could be used in existing equipment. This would extend the lifetimes of machines, that may be retired early if no CFCs were available in the year 2000. Mr. Lee pointed out that substantial regulatory activity was occurring on the state level indicating the likelihood of success for a recycling program.

3.3 Implementation

- Mr. Lee said the most common method discussed by EPA was direct regulation, where the agency asked particular sectors to report their use, capture and recycle of CFCs, and use equipment that meets specifications.
- Another approach is the use of market incentives involving a deposit refund system. Under this method people buying CFCs pay a distributor a deposit for the use of CFCs. Following the use of the CFCs, the purchaser would reclaim and return them to the distributor to obtain a refund. This would raise the price of CFCs.
- Non-regulatory programs were the final option discussed. Mr. Lee said that this might work in some sectors like halons and the salvage industry.
- Mr. Lee explained EPA's most likely approach will be to develop a program on a sector by sector basis. He stated that it was not EPA's intention to come out with a great big package that addressed recycling in all areas, but instead they will look at individual sectors, identifying sectors such as, automobile air conditioning, and stationary refrigeration and air conditioning, where regulation can move quickly. These sectors experienced rapid changes in technology which would allow EPA to develop more detailed regulatory programs. Other sectors, which need further study, were effectively put on hold while EPA reviewed them to see if voluntary programs were more suitable.

3.4 Issues Raised by ANPRM

- The first issue described by Mr. Lee was private-public sector relations. This involves what type of program is implemented.
- The second major issue was one of preemption especially concerning the current Clean Air Act.

- The final issue he raised was compliance. The problems which will arise under this issue included: how do you monitor compliance, do you require people to have equipment on site, do you require certification and training programs, and do you require annual reporting to the EPA. A final issue which related to compliance was the relationship between the federal, regional, and state governments in developing effective compliance programs.

3.5 Questions and Comments

- Mr. Doniger expressed concern about EPA's ability to keep things on track. He asked whether the ANPRM included a schedule of EPA actions in both areas where they want to implement direct regulations and in areas that they wanted to put on hold.
- Mr. Lee responded that in areas where direct regulation was appropriate they laid out dates while in sectors such as, solvents, the ANPRM did not mention dates.
- Mr. Doniger asked if there were any problem areas where the members of the Advisory Committee might help alleviate any roadblocks in the regulatory process. He thought that this was possible because the members of the Advisory Committee, along with the users, want the supply extended through recycling.
- Mr. Smukowski expressed a concern that the information on EPA recycling regulations would not reach equipment designers. He asked EPA to target education as a goal and solicit reactions from mechanical standards groups.
- Mr. Lee stated that EPA was working closely with ASHRAE, and ARI.
- Mr. Vogelsberg thought that the CFC tax preempted any fee for deposit used in recycling programs. He also expressed a need for EPA to increase the knowledge of any recycling program to all areas of the government in an attempt to increase the number of government groups volunteering to return materials to industry.
- Mr. Likes supported an accelerated rate of work specifying standards for what reclamation equipment should do.
- Mr. Vogelsburg pointed out that by implementing a national program the US will initiate the development of new technology which it can sell to other countries. He believed that this is one of the most compelling reasons for implementing a recycling program quickly.

- Ms. Cook expressed concern about a voluntary deposit system because people could circumvent the program easily and keep emitting the chemicals. She believed a mandatory program was more wise.

4. VOLUNTARY LABELING PROGRAM

- David Lee raised the issue that many products are advertized as ozone safe, yet still deplete ozone -- although at a lower rate than the products they replace. EPA is developing a set of voluntary labeling guidelines, which have four main objectives:

4.1 Objectives of Labeling Guidelines

- The labeling program would 1) assist in phase-out reductions of ozone depleting chemicals, 2) clarify and standardize the ozone safe labeling of products, 3) ensure honest advertizing, and 4) provide an incentive for producers to develop ozone safe goods.

4.2 Scope and Method

- Labeling would be voluntary, and would consist of positive identifications of goods as ozone "safe," "friendly," or "friendlier," according to some criteria. These criteria should be kept simple, and apply only to products containing CFCs. EPA is working with the FTC to develop a formal proposal for the program.

4.3 Current Labeling Requirements

- Mr. Garabedian asked if there are any provisions for labeling CFCs, and Mr. Doniger replied that there are such requirements only for aerosols that were exempted from the CFC ban.
- Mr. Garabedian noted a negative labeling provision that applies to R-12 (refrigerator) cans.

4.4 Affects of Labeling on Producers and Consumers

- Mr. Vogelsberg argued that, for labeling to have merit, there must first be viable substitute options open to the manufacturer. Otherwise labeling may wrongfully dissuade a consumer from buying a product.

- Ms. Cook responded that, because of widespread misconceptions about CFCs, labeling and recycling are needed to educate the public.
- Mr. Doniger expressed concern that labels should not be focussed solely on ozone depletion, but on overall environmental safety. Ozone safe labels should not weaken the current proposals for negative labeling.

4.5 Legal Logistics of Labeling

- Ms. Aulisio asked if federal labeling would preempt state provisions, and how a specific, nationwide labeling language would be developed. Mr. Soorus felt strongly that there should be federal preemption to avoid higher prices, market contortions, and conflicting standards.
- Mr. Garabedian objected to preemption, saying that provisions should work together because they have the same intent, and that the message in the labels was more important than the wording.
- Mr. Smukowski said it was important to consider the many and complex labeling requirements that some manufacturers must follow.
- Ms. Cook stressed the need for continuity in standards and language for labels.
- Ms. Aulisio noted how there may develop confusion as to what are actual versus what are only perceived voluntary guidelines.

4.6 Items of General Concern

- Mr. Vogelsberg affirmed that the main objective was to encourage the elimination of CFCs, and therefore it may be counterproductive to negatively label an HCFC product. Mr. Doniger disagreed, and cited McDonald's safe packaging campaign.

5. OTHER

- Ms. Aulisio expressed concern about the handling and processing issue due to what she perceived as a lack of communication between EPA's Air Office and Toxics office. This initiated a discussion of the pros and cons of listing CFCs and Halons under SARA Title III.

- Mr. Doniger stated that the main purpose for listing these chemical was to get an annual report of the total quantity of halons and CFCs released into each of the various media.
- Mr. Smukowski, Mr. Soorus, and Mr. Vogelsberg believed that the listing Under Title III would unnecessarily increase the amount of paperwork and cost without reducing emissions, furthermore, since releases were only reported above certain thresholds the annual reports would be misrepresentative. Mr. Doniger countered that reporting requirements motivated companies to investigate their own inventories increasing awareness. Another purpose the reported numbers served was to draw attention to emissions which in turn drew attention to the problem.

ATTENDEES

Eileen Claussen, Chairperson
Karla Perri
David Lee
Steven De Canio
Alan Miller
Carol Niemi
Khristine Hall
Tony Vogelsberg
Peter Likes
Leo Soorus
Paul Dugard
Liz Cook
Lorraine Aulisio
David Doniger
Richard Smith
Peter Wychoff
Harold Garabedian
Jerry Stofflet
Raymond Feder
Gert Baumann
David Smukowski